

widthwise direction of the print paper.

Disclosure of Invention

Accordingly, the subject to be solved by the present invention is to make use of a technique (Japanese Patent Application No. 2002-112947 and so forth) proposed already by the applicant of the present patent application wherein an ink droplet from each of ink discharging portions can be deflected to a plurality of directions to make it possible to vary the resolution to print and to control, when the resolution is varied, so that the deterioration of the image may be reduced. A high effect is obtained particularly by a printer which includes a line head having ink discharging portions provided in a juxtaposed relationship over a substantially overall width of the print paper.

The present invention solves the subject described above by the following solving means.

According to the present invention, there is provided a printing apparatus including a head including a plurality of ink discharging portions provided in a juxtaposed relationship thereon and capable of deflecting a discharging direction of an ink droplet to be discharged from each of the ink discharging portions to a plurality of directions in the juxtaposition direction of

the ink discharging portions and further capable of setting the discharging deflection angle which is a maximum deflection amount of an ink droplet to be discharged from the ink discharging portions to a plurality of angles, wherein: a printing resolution is determined in response to inputted print data from between or among a plurality of printing resolutions which are determined from a juxtaposition distance of the ink discharging portions, the discharging deflection angle of an ink droplet to be discharged from the ink discharging portions and a plurality of directions in which an ink droplet can be discharged from the ink discharging portions; and those of the ink discharging portions from which an ink droplet is to be discharged and the discharging deflection angle of an ink droplet to be discharged from the ink discharging portions are selected based on the determined printing resolution and the discharging direction of one or two or more ink droplets from the selected ink discharging portions on one line is determined; and a discharge execution signal with which the discharging direction of an ink droplet can be specified is transmitted to each of the selected ink discharging portions to execute printing with the printing resolution determined in response to the inputted print data from between or among the plurality

of printing resolutions.

In the invention described above, the head of the printing apparatus is formed such that the discharging direction of an ink droplet can be deflected to a plurality of directions in the juxtaposition direction of